## United States Patent and Trademark Opec



 Wratroter, 20. 80831


APR 162003
Determination of Patent Term Extension under 35 U.S.C
Iefrggology Center 2600 (appltextion fled after June 7, $19 \% 8$ but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.

## Match and Return

Thomas Beam fax 212-894-5629.

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\text { tel } 212-940-8729
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Page 3 of 4
PTOL_8S (REV. 04-02) Approved for uso through 01/31/2004.

Untted States Paveint and Thademark Office

## NOTICE OF ALLOWANCE AND FEE(S) DUE

$03 / 21 / 2003$
Helfgott \& Karas PC
Empire State Building 60th floor
New York, NY 10118


DATE MAILED; 03/24/2003

| APPLICATION NO. | FILINO DATE | FIRST MAMED INVENTOR | ATTORNEY DOCXET NO. | CONFIRMATION NO. |
| :---: | :---: | :---: | :---: | :---: |
| 09/498,857 | 02/07/2000 | Kazchico Yamaguchi | FÜ 16.987 | 9388 |

TITLE OF INVENTION: BASE STATION APPARATUS

| APPLN. TYPE | SMALL ENTITY | ISSUB FEB | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Emprovisional | NO | \$1300 | 50 | \$1300 | 号 |

## THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECIITON ON TEIE MERITS IS CLOSED, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. TRIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON

 PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONUHE FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE RXIBNDED. SEE 35 U.S.C. 151. THE LSSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THES APPLICATION. TEE PTOL-8SB (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS
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## HOW TO REPLY TO TEIS NOTICE:

## I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current
SMALL ENTITY status:
A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:
A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and $1 / 2$ the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section " 4 b " of Part B - Fee(s) Transmitial should be completed and an extra copy of the form should be submitted.
III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMIINDER: Utility patents lasuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patemitee's responibility to ensure thmely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

## Complete and send thin form, together with applicable fee(8), to: Mnil Box ISSUE FEE Commiscioner for Patents Washfogton, D.C. 20231 <br> Pr (703)7464000



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TITLE OF INVENTION: BASE STATION APPARATUS

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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRDNTED ON THE PATENT (print or type)

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Commissioner for Patents is requested to apply the leare Fee and Publication Fee (if any) or to re-apply any previously prid issue fee to the application identified above.
(Authorizod Signaturc)

## (Date)

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Ints collection of information is require by 37 CFR 1.SII. Itre informition is requiled to
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collection of inforwork Reduction Act of 1995, no pernoms ere recquired to rexpood to a TOL_85 (REV, 04-02) ANPMIT THIS FORM WITH FEE(S)

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## Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Eees for Eiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: htto:/wwwiuspto gov/main/howtofees.htm.
If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Page 4 of 4

| Notice of Allowability | Applieation No． 09／498，857 | Applleant（s） <br> YAMAGUCHI，KAZUHIKO |  |
| :---: | :---: | :---: | :---: |
|  | Examiner <br> Min Jung | Art Unit 2683 |  |

－The MAILNG DATE of thls communtcation appears on the cover sheet wfth the corraspondence addrese－
All claims being allowable，PROSECUTION ON THE MERITS is（OR REMANS）CLOSED in this application．If not included
herewith（or previously malled），a Notice of Allowance（PTOL－85）or other appropitate communication will be malled in due course．THIS NOTICE OF ALLOWABIITY is NOT A GRANT OF PATENT RIGHT8．This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant．See 37 CFR 1.313 and MPEP 1308.

1． $\mathbb{Z}$ This communication is responsive to Agoflagtion filed Fehrurav 7． 2000.
2．$\boxtimes$ The allowed ctaim（s）ts／are 1－7．
3．$\boxtimes$ The drawings filed on 07 Febnfarc 2000 are accepted by the Examiner．
4．$\triangle$ Acknowledgment is made of a ciaim for foraign priortly under 35 U．S．C．$\$ 119$（a）－（d）or（f）．
a） $\mathbb{X}$ All
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of the：

1．$\triangle$ Certified copies of the priorty documents have been received．Certified copies of the priorty documents have been recetved in Application No． $\qquad$ ．
3．Coples of the certified coples of the priorty documents have been recelved in this national stage application friom the Intarnational Bureau（PCT Rule 17．2（a））．
－Cortifled copies not recelved： $\qquad$ －

5． Acknowledgment is made of a ciaim for domestic priority under 35 U．S．C．$\$ 119$（e）（to a provisional application）．
（a）The translation of the foreign language provisional application has been recelved．
6．Acknowledgment is made of a clalm for domestic prority under 35 U．S．C．$\$ \mathbf{\$ 8} 120$ and／or 121.

Applicant has THREE MONTHS FROM THE＂MALLING DATE＂of this communication to file a reply complying with the requirements noted below．Fallure to timely comply will result in ABANDONMENT of this application．THIS THREEMONTH PERIOD is NOT EXTENDABLE．

7．$\square$ A SUBSTITUTE OATH OR DECLARATION must be submitted．Note the attached EXAMINER＇S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION（PTO－152）which gives reason（s）why the oath or declaration is deficient．

8．$\square$ CORRECTED DRAWINGS must be submitted．
（a）$\square$ including changes required by the Notice of Draftsperson＇s Patent Drawing Review（ PTO－948）attached 1）$\square$ hereto or 2）to Paper No． $\qquad$ ＿．
（b）including changes required by the proposed drawing correction filed $\qquad$ which has been approved by the Examiner．
（c）$\square$ Including changes required by the attached Examiner＇s Amendment／Comment or in the Office action of Paper No． $\qquad$ ．

Identifytng Indicla such as the appllcation nimber（eee 37 CFR 1．84c））should be writien on the drawinge In the top margin（not the back） of each sheit．The drawinges should be filed as a coparate paper with a transmitual teuter addressed to the Orictal Draftiperson．

9．$\square$ DEPOSIT OF and／or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted．Note the attached Examiner＇s comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL．

## Attachment（s）

1区 Notice of References Cited（PTO－892）
3 X Notice of Drafiperson＇s Patent Drawing Review（PTO－948）
5 区 Information Disclosure Statements（PTO－1449），Paper No． 3.
$7 \square$
Examiner＇s Comment Regarding Requirement for Deposit of Biotogical Matertal

2■ Notice of Informal Patent Application（PTO－152）Interviow Summary（PTO－413），Paper No $\qquad$ ．
$6 \square$ Examiner＇s Amendment＇Comment
8区 Examiner＇s Statement of Reasons for Allowance 9 $\square$ Other

1. The following is an examiner's statement of reasons for allowance: All the claims are allowable over the prior art of record because prior art fail to teach or fairly suggest a base station apparatus which divides one cell into a plurality of sectors and communicates with a plurality of terminal stations according to TDMA via antennas which are provided for each of the sectors, the base station apparatus comprising: a frequency-based distributor and modulator unit which distributes each of channel data to be transmitted in correspondence with each of time slots of a plurality of transmission frequency-based channels, and modulates the distributed channel data to modulated signals; a sector-based distributor and multiplexer unit which distributes the modulated signals to sector-based channels which are prescribed in advance in correspondence with the time slots, and multiplexes the distributed modulated signals for each of the sector-based channels; and a channel connection controller which generates distribution control information of each of the transmission frequency-based channels and the sector based channels depending on a channel connect or disconnect request.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
2. Any inquiry conceming this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 703-305-4363. The examiner can normally be reached on Monday-Friday, 7AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-3054750.

MU
March 21, 2003


Min Jung
Primary Examiner

| Notlce of References Cited | Applicatton/Control No. 09/488,857 | Applicant(s)/Patant Under Reoxamination <br> YAMAGUCHI, KAZUHIKO |  |
| :---: | :---: | :---: | :---: |
|  | Examiné Min Jung | Art Unit 2663 | Page 1 of 1 |

U.8. PATENT DOCUMENTB

| * |  | Document Number Country CodoNumbert-tind Code | Date MM-MY | Name | Clasifilcation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| * | A | US-6,317,423 | 11-2001 | Jantil ef al. | 370/347 |
| * | B | US-6,385,188 | 05-2002 | Kim et al. | 370/342 |
| * | C | US-6,483,823 | 11-2002 | Mansour, Nagl A. | 370/330 |
| + | D | US-6,236,866 | 05-2001 | Meyer et al. | 455/562 |
| - | E | US-5,790,959 | 08-1998 | Scherer, Dlater | 4551561 |
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FOREICN PATENT DOCUMENT8

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NONPATENT DOCUMENTS

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| $\begin{array}{ll}\text { 1449/PTO } \\ & \\ & \\ & \text { INFOR }\end{array}$ | U.S. Department of Commerce | Application No. : | a |
|  | Patent and Trademark Office | Filing Date |  |
|  |  | First Named Inventor: K. YAMAGUC |  |
|  | STATEMENT BY APPLICANT |  | Group Art Unit |  |
|  |  |  | Examiner Name |  |
|  |  |  | Attorney Docket No. : FUJ 16.987 |  |


| U.S. PATENT DOCUMENTS |  |  |  |  |  |  |
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| Examiner Initials | $\begin{array}{\|l\|} \hline \text { Cite } \\ \text { No. } 1 \end{array}$ | U.S. Patent Document | Kind Code if known | Name of Patentec or Applicant of Cited Document | Date of <br> Publication of Cited <br> Document MM-DDYYYY | Pages, Columns Lines Where Relevant Passages or Relevant Figures Appear |
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FOREIGN DOCUMENTS

| $\begin{aligned} & \hline \text { Examinet } \\ & \text { Initials } \end{aligned}$ | Cite No. ${ }^{\text { }}$ |  | Country | Name of Patentee or Applicant of Cited Document | Date of <br> Publication of Cited Document MM-DDYYYY |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cdots$ |  | 62-104232 | JP | NIPPON TELEGR \& TELPH CORP | 5/14/87 |  |
| w |  | 63-272137 | JP | TOKYO ELECTRIC POWER CO INC | 11/9/88 |  |
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| Examiner <br> Signature | NTM | Date <br> Considered | $3 / 20 / 63$ |
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Examiner. Initial if referenter considered, whyw or not citation is in conformance with MPEP 609 . Eraw a line through citation if not in conformance and not considered. Include clps of this form with next communication to applicant.
'Unique citation designation number. ${ }^{2}$ See attached Kinds of U.S. Patent Documents. ${ }^{3}$ Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). ${ }^{4}$ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.' Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. $1^{6}$ if possible. ${ }^{6}$ Appricemt is to place a check mark here if English language Translation is attached.

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